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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 09/778,704 Filing Date: February 07, 2001 Appellant(s): EDGE ET AL.

Mark G. Bocchetti
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 8/29/2005 appealing from the Office action mailed 4/1/2005.

Art Unit: 2628

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

Appellant's statement of related appeals acknowledged.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

- ➤ Copending Application No. 09/778,515.
- Elaine Weinmann and Peter Lourekas (Photoshop for windows), hereafter refer "Elaine" with copyright of 1996.
- Adobe Technical Guides (copyright 2000).
- "Why do Images Appear Darker on Some Displays? An Explanation of Monitor Gamma" By Robert W. Berger, copyright 1997.

Art Unit: 2628

Page 3

> "Display gamma estimation applet" by Hans Brettel, copyright 1999, said applet can be located at http://www.tsi.enst.fr/~brettel/TESTS/Gamma/Gamma.html.

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

conflicting claims have not in fact been patented.

- Claims 1, 5, 6, 7, 9, 11, 12, 13, 16, 17, 18, 22, 27, 29, 31, 32, 33, 35, 37, 38, 41 and 42 provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 6, 7, 8, 10, 12, 13, 14, 15, 16, 19, 21, 24, 25, 30, 31, 32, 34, 36, 37, 40 and 39 of copending Application No. 09/778,515. Although the conflicting claims are not identical, they are not patentably distinct from each other because, see below:

 This is a provisional obviousness-type double patenting rejection because the
- Claims 1-4, 6-8, 11, 13, 27-30, 32-34, 37 and 39 rejected under 35 U.S.C. 102(b) as being anticipated by Elaine Weinmann and Peter Lourekas (Photoshop for windows), hereafter refer "Elaine" with copyright of 1996.
- Claims 5, 12, 15-21, 22, 24, 26, 31, 38 and 41-42 rejected under 35 U.S.C. 103(a) as being unpatentable over Elaine, and further in view of Adobe Technical Guides (copyright 2000; hereinafter referenced as "Adobe").
- ➤ Claims 14, 25 and 40 rejected under 35 U.S.C. 103(a) as being unpatentable over Elaine, Adobe and "Why do Images Appear Darker on Some Displays? An Explanation of Monitor Gamma" By Robert W. Berger, copyright 1997 (referenced hereinafter as "Berger"), and further in view of "Display gamma"

Art Unit: 2628

estimation applet" by Hans Brettel, copyright 1999, said applet can be located at http://www.tsi.enst.fr/~brettel/TESTS/Gamma/Gamma.html (referenced hereinafter as "Brettel").

(10) Response to Argument

An appeal conference has been held on 11/10/2005 and Appellant's arguments have been fully considered but they are not persuasive. Because Appellant never described distinguishing between the claim invention over the prior art.

[A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See In re Casey, 152 USPQ 235 (CCPA 1967) and In re Otto, 136 USPQ 458, 459 (CCPA 1963).]

The broadest claim is the independent claim 1. The claimed invention does not relate to remote color characterization of a display, there is nowhere in claim 1 mentioned remote color characterization as Appellant disclosed on page 4, line 5 of the Appeal Brief.

Appellant on page 13, lines 1-5 argues as follows:

- ➤ The Examiner's analysis is improper on many levels!
- > The Examiner has failed to appreciate the basic technical differences between the claimed invention and the prior art!
- > The Examiner seems to be confused establishing a prima facie of anticipation or obviousness!

Examiner's reply: Examiner will be pointing them out as going through the rest of the argument.

Appellant argues the Examiner's analysis is improper on many levels!

Examiner's reply: Examiner desires to reply directly to Appellant concerns, but Appellant does not precisely identify, what is an "improper on many levels".

Appellant argues that the Examiner has failed to appreciate the basic technical differences between the claimed invention and the prior art!

Examiner's reply: Examiner recognizes the Appellant's work, note: Appellant normally explains the technical differences between the claimed invention and the prior art. Appellant nowhere describes distinguishing between the claimed invention and the prior art in the brief.

Examiner's reply to the Appellant's expression "the Examiner seems to be confused establishing a prima facie of anticipation or obviousness": Appellant's assumption is wrong.

Appellant on page 14, lines 17-20 argues that Weinmann does not discuss estimation of the gray balance of a display device.

Examiner's reply: Appellant on page 5 lines 6-11 of the specification discloses in one of embodiment, the invention provides a method comprising estimating a gray balance of the display device based on user selection of one of the gray elements (i.e. based on an estimated gamma) that appears to most closely blend with a gray background. Similar language used in the claim 1. Weinmann in fig. 9, page 256 illustrates clearly a gray element having red, green and blue values with adjusting sliders. Meaning, e.g. the green value can be selected different from the red and blue values, or another words: the red and blue values can be readjusted/shifted without adjusting/shifting the green value, to obtain/estimate/calibrate gamma (i.e. in fig.9 shows Art Unit: 2628

as number 8). In fig. 9 illustrates a user can select one of calibration squares or gray elements as an appropriate background color. Weinmann in fig. 2 on page 111 illustrates the gray element having red green and blue including the foreground and the background colors.

Examiner's comment: Appellant's arguments are not persuasive, because Appellant never describes distinguishing between the claim invention over the prior art in the appeal brief, also Appellant does not provide answer for the following questions from previous final office action:

When (how often) does the information transmit via a network?

How does the information transmit via a network?

Does the information consider as a smart program/file/information transmitting via a network?

How does an estimated gamma generate a first gray element?

What is an estimated gamma?

How does a set of red-blue shifted gray element generate?

Is there any special method to estimate a gray balance of display based on user selection?

What are the values of Gamma for CRT and LCD displays?

Does this invention covers only in VGA system?

Does the gamma correction based on Voltage source?

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

Art Unit: 2628

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Page 7

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 5, 6, 7, 9, 11, 12, 13, 16, 17, 18, 22, 27, 29, 31, 32, 33, 35, 37, 38, 41 and 42 provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 6, 7, 8, 10, 12, 13, 14, 15, 16, 19, 21, 24, 25, 30, 31, 32, 34, 36, 37, 40 and 39 of copending Application No. 09/778,515. Although the conflicting claims are not identical, they are not patentably distinct from each other because, see below:

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

The comparison of claims 1,16 and 27 (the limitations shown by A', B', C',) over claims 1, 15, and 25 (the limitations shown by A, B, C,) of copending Application No. 09/778,515.

- Pending independent claim 1, of 09/778,515: A method comprising: (A) generating gray elements and a dithered gray background for display on a display device, (B) the dithered gray background representing a gray level of approximately 25 to 40%; (C) estimating a gamma for the display device based on user selection of one of the gray elements that appears to most closely blend with the dithered gray background.
- ➤ Pending independent claim 1, of 09/778,704: A method comprising: (A') displaying on a display device a first gray element having reds green and blue values that are substantially equivalent to a selected green value based on an estimated gamma for a green channel of the display device; (B') displaying on the display device a set of red-

Art Unit: 2628

blue shifted gray elements with green values substantially equivalent to the selected green value, wherein at least one of the red and blue values of each of the red-blue shifted gray elements is different from the selected green value, and thereby represent shifts in the red channel, blue channel, or a combination of the red and blue channels away from the first gray element; (C') and estimating a gray balance of the display device based on user selection of one of the gray elements that appears to most closely blend with a gray background.

Page 8

The comparison: The limitations A and C teach by A' and C'. But the limitation of B application specifies explicitly the range of gray level, and the present application specifies broader range (i.e. 0-100%), and the copending application uses the terms "dithered gray background representing a gray level.", however, B' and the present application specifies combination of the color channels away from the gray level. The meaning of both phrases is substantially equivalent to each other. A person skill in the art assumes the combination of red, blue, green and gray values are between 0-100% of the display device. If the person skill in the art takes away the gray values of 25-40% off of 100%, the remaining of 100% should be a combination of red, blue and green or any one of these colors.

Pending independent claim 15, of 09/778,515: A system comprising: (A) a web server residing on a computer network, the web server transmitting web pages to remote clients residing on the computer network; (B) a color image server residing on the computer network, the color image server transmitting color images referenced by the web pages to the clients for display on display devices associated with the clients; (C) a color profile server residing on the computer network, the color profile server guiding the clients

Art Unit: 2628

through a color profiling process to obtain information characterizing the color responses of the display devices associated with the clients, wherein the information includes a gamma for the display device, the gamma being determined by selecting one of a plurality of gray elements displayed by the display device that appears to most closely blend with a dithered gray background that represents a gray level of approximately 25 to 40%; (D) and one or more color correction modules that modify the color images transmitted by the color image server based on the information to improve the accuracy of the color images when displayed on the respective display device.

Page 9

Pending independent claim 16, of 09/778,704: A system comprising: (A') a web server residing on a computer network, the web server transmitting web pages to remote clients residing on the computer network; (B') a color image server residing on the computer network, the color image server transmitting color images referenced by the web pages to the clients for display on display devices associated with the clients; and (C') a color profile server residing on the computer network, the color profile server guiding the clients through a color profiling process to obtain information characterizing the color responses of the display devices associated with the clients, wherein the information includes a gray balance for each of the display devices, and the color profiling process includes: displaying on a display device a first gray element having red, green and blue values that are substantially equivalent to a selected green value based on an estimated gamma for the green channel of the display device, displaying on a display device a set of red-blue shifted gray elements with green values substantially equivalent to the selected green value, wherein at least one of the red and blue values of each of the red-blue shifted

Art Unit: 2628

gray elements is different from the selected green value, and thereby represent shifts in the red channel, blue channel, or a combination of the red and blue channels away from the first gray element; and selecting one of the gray values that appears to most closely blend with a gray background, and estimating the gray balance of the display device based on the selected gray element; (D') and one or more color correction modules that modify the color images transmitted by the color image server based on the information to improve the accuracy of the color images when displayed on the respective display device.

Page 10

The comparison: The limitations of A, B, C and D teach by the A', B', C' and D'.

➤ Pending independent claim 25, of 09/778,515: A computer-readable medium containing instructions that cause a programmable processor to: (A) display a plurality of gray elements on a display device against a dithered gray background representing a gray level of approximately 25 to 40%; (B) select one the gray elements that appears to most closely blend with a dithered gray background; (C) and estimate a gamma for the display device based on the selected gray element.

Pending independent claim 27, of 09/778,704: A computer readable medium comprising instructions that cause a programmable processor to: (A') display on a display device a first gray element having red, green and blue values that are substantially equivalent to a selected green value based on an estimated gamma for a green channel of the a display device; (B') display on the displace device a set of red-blue shifted gray elements with green values substantially equivalent to the selected green value, wherein at least one of the red and blue values of each of the red-blue shifted gray elements is different from the selected green value, and thereby that

Art Unit: 2628

represent shifts in the red channel, blue channel, or a combination of the red and blue channels away from the first gray element; (C') and generate a gray balance of the display device based on user selection of one of the gray elements that appears to most closely blend with a gray background.

The comparison: The limitations B and C teach by the A' and C'. But the limitation of A states 25-40% gray level, however, B' limitation states red-blue shift gray level as a way to adjust the second level. By adjusting the red-blue shift gray level, one can obtain gray level of 25-40% of a limitation.

> Pending dependent claims 6, 7, 8, 10, 12, 13, 14, 16, 19, 21, 24, 30, 31, 32, 34, 36, 37, 40 and 39 of 09/778,515 have the same claim invention of claims 5, 6, 7, 11, 12, 13, 17, 18, 29, 31, 32, 33, 37, 38, 41 and 42 of 09/778,704 respectively.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 1. Claims 1-4, 6-8, 11, 13, 27-30, 32-34, 37 and 39 rejected under 35 U.S.C. 102(b) as being anticipated by Elaine Weinmann and Peter Lourekas (Photoshop for windows), hereafter refer "Elaine" with copyright of 1996.
- 2. Claim 1.

Elaine on page 256 Fig. 9, and also refer to page 122 Fig. 10 and page 252 Fig. 2 illustrates the step of "A method comprising: displaying on a display device a first gray element having reds

Art Unit: 2628

green and blue values that are substantially equivalent to a selected green value based on an estimated gamma for a green channel of the display device; Elaine on page 15, Fig. 14 illustrates the step of "displaying on the display device a set of red-blue shifted gray elements with green values substantially equivalent to the selected green value, wherein at least one of the red and blue values of each of the red-blue shifted gray elements is different from the selected green value, and thereby represent shifts in the red channel, blue channel, or a combination of the red and blue channels away from the first gray element"; Elaine on page 256, Fig. 9 illustrates the step of "estimating a gray balance of the display device based on user selection of one of the gray elements that appears to most closely blend with a gray background". Elaine on page 256 in fig. 9 and under subject of "to adjust the gamma:" discloses the limitations in claim language.

3. Claim 2.

Elaine on page 256 Fig. 9, and also refer to page 15, Fig. 14 illustrates the step of "The method of claim 1, further comprising characterizing the colorimetric response of the display device based on the estimated gamma and estimated gray balance".

4. Claim 3.

Elaine on page 256 Fig. 9, and also refer to page 111, Fig. 2 and page 252, Fig. 2 illustrates the step of "The method of claim 1, further comprising: selecting one of a plurality of green elements displayed by a display device that appears to most closely blend with a dithered green background; and estimating the gamma for the green channel of the display device based on the selected green element". Elaine on page 256 in fig. 9 illustrates a slide bar for a plurality of green elements, which are represented lesser or greater gradation in green intensity.

5. Claim 4.

Art Unit: 2628

Elaine on page 256 Fig. 9, and also refer to page 111, Fig. 2 illustrates the step of "The method of claim 1, the method further comprising: modifying a color image based at least in part on the estimated gray balance; and delivering the modified color image to the display device".

6. Claim 6.

Elaine on page 256, Fig. 9 illustrates the steps of "The method of claim 1, further comprising determining the estimated gamma by: selecting one of a first plurality of green elements displayed by the display device that appears to most closely blend with the dithered green background; estimating a coarse gamma for the display device based on the selected one of the first plurality of green elements; selecting one of a second plurality of green elements displayed by the display device that appears to most closely blend with the dithered green background, wherein the second plurality of green elements includes the selected one of the first plurality of green elements; and estimating a fine gamma for the display device based on the selected one of the second plurality of green elements, wherein the estimated fine gamma is the estimated gamma". Elaine in fig. 9 page 256 illustrates a coarse (rough) gamma and a fine gamma.

7. Claim 7.

Elaine on page 256, Fig. 9 illustrates the steps of "The method of claim 6, wherein the first plurality of green elements represent greater gradations in green intensity that the second plurality of green elements".

8. Claim 8.

Elaine on page 256, Fig. 9 illustrates the steps of "The method of claim 1, further comprising displaying the first gray element in a substantially central position relative to the red-blue shifted elements,".

Art Unit: 2628

9. Claim 11.

Elaine on page 256, Fig. 9 illustrates the step of "The method of claim 1, further comprising: estimating the blackpoint of the display device; and characterizing the colorimetric response of the display device based on the estimated gamma, blackpoint, and gray balance".

10. Claim 13.

Elaine on page 256, Fig. 9 illustrates the step of "The method of claim 11, further comprising: modifying a color image based on the estimated blackpoint, gamma, and gray balance; and delivering the modified color image to the display device".

11. Claim 27.

Elaine on page 256 Fig. 9, and also refer to page 122 Fig. 10 and page 252 Fig. 2 illustrates the step of "A computer readable medium comprising instructions that cause a programmable processor to: display on a display device a first gray element having red, green and blue values that are substantially equivalent to a selected green value based on an estimated gamma for a green channel of the a display device"; (Elaine on page 15, Fig. 14 illustrates the step of) "display on the displace device a set of red-blue shifted gray elements with green values substantially equivalent to the selected green value, wherein at least one of the red and blue values of each of the red-blue shifted gray elements is different from the selected green value, and thereby that represent shifts in the red channel, blue channel, or a combination of the red and blue channels away from the first gray element"; Elaine on page 256, Fig. 9 illustrates the step of "generate a gray balance of the display device based on user selection of one of the gray elements that appears to most closely blend with a gray background",

12. Claim 28.

Art Unit: 2628

Elaine on page 256, Fig. 9 illustrates the step of "The computer readable medium of claim 27, wherein the instructions cause the processor to characterize the colorimetric response of the display device based on the estimated gamma and estimated gray balance".

13. Claim 29.

"The computer readable medium of claim 27, Elaine on page 256 Fig. 9, and also refer to page 15, Fig. 14 illustrates the step of wherein the instructions cause the processor to: select one of a plurality of green elements displayed by a display device that appears to most closely blend with a dithered green background; Elaine on page 256, Fig. 9 illustrates the step of "estimate the gamma for the green channel of the display device based on the selected green element".

14. Claim 30.

Elaine on page 256, Fig. 9 illustrates the step of "The computer readable medium of claim 27, wherein the instructions cause the processor to: modify a color image based at least in part on the estimated gray balance; and deliver the modified color image to the display device".

15. Claim 32.

Elaine on page 256, Fig. 9 illustrates the step of "The computer readable medium of claim 27, wherein the instructions cause the processor to determine the estimated gamma by: selecting one of a first plurality of green elements displayed by the display device that appears to most closely blend with the dithered green background; estimating a coarse gamma for the display device based on the selected one of the first plurality of green elements; Elaine on page 256, Fig. 9 illustrates the step of "selecting one of a second plurality of green elements displayed by the display device that appears to most closely blend with the dithered green background, wherein the second plurality of green elements includes the selected one of the first plurality of green

Art Unit: 2628

elements; and estimating a fine gamma for the display device based on the selected one of the second plurality of green elements, wherein the estimated fine gamma is the estimated gamma".

Page 16

16. Claim 33.

Elaine on page 256, Fig. 9 illustrates the step of "The computer readable medium of claim 32, wherein the first plurality of green elements represent greater gradations in green intensity that the second plurality of green elements", The step is inherent because a gradual passing from green elements (one tint or shade) to another have greater gradation in green (color) intensity than the second green elements.

17. Claim 34.

Elaine on page 256, Fig. 9 illustrates the step of "The computer readable medium of claim 27, wherein the instructions cause the processor to display the first gray element in a substantially central position relative to the red-blue shifted elements.

18. Claim 37.

Elaine on page 256, Fig. 9 illustrates the step of "The computer readable medium of claim 27, wherein the instructions cause the processor to: estimate the blackpoint of the display device; and characterize the colorimetric response of the display device based on the estimated gamma, blackpoint, and gray balance".

19. Claim 39.

Elaine on page 256, Fig. 9 illustrates the step of "The computer readable medium of claim 37, wherein the instructions cause the processor to: modify a color image based on the estimated blackpoint, gamma, and gray balance; and deliver the modified color image to the display device".

Art Unit: 2628

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

20. Claims 5, 12, 15-21, 22, 24, 26, 31, 38 and 41-42 rejected under 35 U.S.C. 103(a) as being unpatentable over Elaine, and further in view of Adobe Technical Guides (copyright 2000; hereinafter referenced as "Adobe").

21. Claim 5.

Elaine on page 256, Fig. 9 illustrates the step of "The method of claim 1, wherein the display device is associated with a client residing on a computer network, the method further comprising: transmitting information representing the estimated gray balance to a remote server on the network; modifying the color image at the remote server based on the information; and delivering the modified color image to the client via the computer network for display on the display device". Elaine does not explicitly specify transmitting information via computer network. However, Adobe on pages 2-9, teaches Windows NT, 95, 98 and Mac OS which could operate as clients or servers. Using Adobe Gamma (color management workflow) can be installed on a server or on a client workstation. As claim discloses that transmitting information representing the estimated gamma to a remote server on the network; The Adobe gamma modifies the color image when installed/executed on the server, a workstation, or on a network. To one of ordinary skill in the art, it would have been obvious to use the green channel as the

Page 18

Art Unit: 2628

range of gray levels. And also dither gray values because the two different gray areas (background and center square) need to be generated in different ways for the process to work.

22. Claim 12.

Elaine on page 256, Fig. 9 illustrates the step of "The method of claim 11, wherein the display device is associated with a client residing on a computer network, the method further comprising: transmitting information representing the estimated blackpoint, gamma, and gray balance to a remote server on the network; modifying the color image at the remote server based on the information; and delivering the modified color image to the client via the computer network for display on the display device". Elaine does not explicitly specify transmitting information via computer network. However, Adobe on pages 2-9, teaches Windows NT, 95, 98 and Mac OS which could operate as clients or servers. Using Adobe Gamma (color management workflow) can be installed on a server or on a client workstation. As claim discloses that transmitting information representing the estimated gamma to a remote server on the network; The Adobe gamma modifies the color image when installed/executed on the server, a workstation, or on a network. To one of ordinary skill in the art, it would have been obvious to use the green channel as the range of gray levels. And also dither gray values because the two different gray areas (background and center square) need to be generated in different ways for the process to work.

23. Claim 15.

Elaine on page 256, Fig. 9 illustrates the step of "The method of claim 1, wherein the display device is associated with a client on a computer network, the method further comprising guiding the client through the process of obtaining the estimated gray balance by delivering one or more

Art Unit: 2628

instructional web pages to the client". Elaine does not explicitly specify transmitting information via computer network. However, Adobe on pages 2-9, teaches Windows NT, 95, 98 and Mac OS which could operate as clients or servers. Using Adobe Gamma (color management workflow) can be installed on a server or on a client workstation. As claim discloses that transmitting information representing the estimated gamma to a remote server on the network; The Adobe gamma modifies the color image when installed/executed on the server, a workstation, or on a network. To one of ordinary skill in the art, it would have been obvious to use the green channel as the range of gray levels. And also dither gray values because the two different gray areas (background and center square) need to be generated in different ways for the process to work.

Page 19

24. Claim 16.

Elaine on page 256, Fig. 9 illustrates the step of "A system comprising: a web server residing on a computer network, the web server transmitting web pages to remote clients residing on the computer network; a color image server residing on the computer network, the color image server transmitting color images referenced by the web pages to the clients for display on display devices associated with the clients; and a color profile server residing on the computer network, the color profile server guiding the clients through a color profiling process to obtain information characterizing the color responses of the display devices associated with the clients, wherein the information includes a gray balance for each of the display devices, and the color profiling process includes: displaying on a display device a first gray element having red, green and blue values that are substantially equivalent to a selected green value based on an estimated gamma for the green channel of the display device, displaying on a display device a set of red-blue shifted gray elements with green values substantially equivalent to the selected green value,

Art Unit: 2628

wherein at least one of the red and blue values of each of the red-blue shifted gray elements is different from the selected green value, and thereby represent shifts in the red channel, blue channel, or a combination of the red and blue channels away from the first gray element; and selecting one of the gray values that appears to most closely blend with a gray background, and estimating the gray balance of the display device based on the selected gray element; and one or more color correction modules that modify the color images transmitted by the color image server based on the information to improve the accuracy of the color images when displayed on the respective display device". Web cookie or HTTP cookie or just cookies can contain any arbitrary information the server chooses and are used to maintain state between otherwise stateless HTTP transactions. Generally the function of Web cookie is similar as transmitting information via networks. Elaine does not explicitly specify transmitting information via computer network. However, Adobe on pages 2-9, teaches Windows NT, 95, 98 and Mac OS which could operate as clients or servers. Using Adobe Gamma (color management workflow) can be installed on a server or on a client workstation. As claim discloses that transmitting information representing the estimated gamma to a remote server on the network; The Adobe gamma modifies the color image when installed/executed on the server, a workstation, or on a network. To one of ordinary skill in the art, it would have been obvious to use the green channel as the range of gray levels. And also dither gray values because the two different gray areas (background and center square) need to be generated in different ways for the process to work.

25. Claim 17.

Elaine on page 256, Fig. 9 illustrates the step of "The system of claim 16, wherein the color image server stores the information to the client in a web cookie, the client transmits the web

Art Unit: 2628

cookie from the client to the server, and the color image server modifies the color image via the server based on the contents of the web cookie". Elaine does not explicitly specify transmitting information via computer network. However, Adobe on pages 2-9, teaches Windows NT, 95, 98 and Mac OS which could operate as clients or servers. Using Adobe Gamma (color management workflow) can be installed on a server or on a client workstation. As claim discloses that transmitting information representing the estimated gamma to a remote server on the network; The Adobe gamma modifies the color image when installed/executed on the server, a workstation, or on a network. To one of ordinary skill in the art, it would have been obvious to use the green channel as the range of gray levels. And also dither gray values because the two different gray areas (background and center square) need to be generated in different ways for the process to work.

26. Claim 18.

Elaine on page 256, Fig. 9 illustrates the step of "The system of claim 16, wherein the color profiling process includes: selecting one of a plurality of green elements displayed by a display device that appears to most closely blend with a dithered green background; and estimating the gamma for the green channel of the display device based on the selected green element". Elaine does not explicitly specify transmitting information via computer network, however, Adobe on pages 5 and 6, illustrates the gray elements are green elements representing a range of gray levels for the green channel, and the dithered gray background is a dithered green background.

27. Claim 19.

Elaine on page 256, Fig. 9 illustrates the step of "The system of claim 16, wherein the color profiling process includes determining the estimated gamma by: selecting one of a first plurality

Art Unit: 2628

of green elements displayed by the display device that appears to most closely blend with the dithered green background; estimating a coarse gamma for the display device based on the selected one of the first plurality of green elements; selecting one of a second plurality of green elements displayed by the display device that appears to most closely blend with the dithered green background, wherein the second plurality of green elements includes the selected one of the first plurality of green elements; and estimating a fine gamma for the display device based on the selected one of the second plurality of green elements, wherein the estimated fine gamma is the estimated gamma". Elaine does not explicitly specify transmitting information via computer network, and also, Elaine on page 24, lines 1-18, teaches that the Photoshop will run on Windows NT. The primary function of Windows NT is for networking area (Server. Workstation, Client and etc.). However, Adobe on pages 2-9, teaches Windows NT, 95, 98 and Mac OS which could operate as clients or servers. Using Adobe Gamma (color management workflow) can be installed on a server or on a client workstation. As claim discloses that transmitting information representing the estimated gamma to a remote server on the network; The Adobe gamma modifies the color image when installed/executed on the server, a workstation, or on a network. To one of ordinary skill in the art, it would have been obvious to use the green channel as the range of gray levels. And also dither gray values because the two different gray areas (background and center square) need to be generated in different ways for the process to work.

28. Claim 20.

Art Unit: 2628

Elaine on page 256, Fig. 9 illustrates the steps of "The system of claim 19, wherein the first plurality of green elements represents greater gradations in green intensity that the second plurality of green elements".

29. Claim 21.

Elaine on page 256, Fig. 9 illustrates the step of "The system of claim 16, wherein the color profiling process includes displaying the first gray element in a substantially central position relative to the red blue shifted elements". Elaine does not explicitly specify transmitting information via computer network, however, Adobe on page 5, illustrates the gray elements are green elements representing a range of gray levels for the green channel, and the dithered gray background is a dithered green background, the method further comprising: selecting one of the selected green element and a plurality of red-blue shifted elements displayed by the display device that appears to most closely blend with the second dithered green background displayed by the display device; and estimating the gray balance of the display device based on the selected one of the selected green element or selected red-blue shifted element.

30. Claim 24.

Elaine on page 256, Fig. 9 illustrates the step of "The system of claim 16, wherein the color profiling process includes: estimating the blackpoint of the display device; and including with the information the estimated gamma and estimated blackpoint".

31. Claim 26.

Elaine on page 256, Fig. 9 illustrates the step of "The method of claim 16, wherein the display device is associated with a client on a computer network, the method further comprising guiding the client through the process of obtaining the estimated gray balance by delivering one or more

Art Unit: 2628

instructional web pages to the client", Elaine does not explicitly specify transmitting information via computer network, however, Adobe on pages 2-9, teaches Windows NT, 95, 98 and Mac OS which could operate as clients or servers. Using Adobe Gamma (color management workflow) can be installed on a server or on a client workstation. As claim discloses that transmitting information representing the estimated gamma to a remote server on the network; The Adobe gamma modifies the color image when installed/executed on the server, a workstation, or on a network.

32. Claim 31.

Elaine on page 256, Fig. 9 illustrates the step of "The computer readable medium of claim 27, wherein the display device is associated with a client residing on a computer network, and the instructions cause the processor to: transmit information representing the estimated gray balance to a remote server on the network; modify the color image at the remote server based on the information; and deliver the modified color image to the client via the computer network for display on the display device", Elaine does not explicitly specify transmitting information via computer network, however, Adobe on pages 2-9, teaches Windows NT, 95, 98 and Mac OS which could operate as clients or servers. Using Adobe Gamma (color management workflow) can be installed on a server or on a client workstation. As claim discloses that transmitting information representing the estimated gamma to a remote server on the network; The Adobe gamma modifies the color image when installed/executed on the server, a workstation, or on a network.

33. Claim 38.

Art Unit: 2628

Elaine on page 256, Fig. 9 illustrates the step of "The computer readable medium of claim 37, wherein the display device is associated with a client residing on a computer network, and the instructions cause the processor to: transmit information representing the estimated blackpoint, gamma, and gray balance to a remote server on the network; modify the color image at the remote server based on the information; and deliver the modified color image to the client via the computer network for display on the display device", Elaine does not explicitly specify transmitting information via computer network, however, Adobe on pages 2-9, teaches Windows NT, 95, 98 and Mac OS which could operate as clients or servers. Using Adobe Gamma (color management workflow) can be installed on a server or on a client workstation. As claim discloses that transmitting information representing the estimated gamma to a remote server on the network; The Adobe gamma modifies the color image when installed/executed on the server, a workstation, or on a network.

Page 25

34. Claim 41.

Elaine on page 256, Fig. 9 illustrates the step of "The computer readable medium of claim 27, wherein the display device is associated with a client on a computer network, and the instructions cause the processor to guide the client through the process of obtaining the estimated gray balance by delivering one or more instructional web pages to the client", Elaine does not explicitly specify transmitting information via computer network, however, Adobe on pages 2-9, teaches Windows NT, 95, 98 and Mac OS which could operate as clients or servers. Using Adobe Gamma (color management workflow) can be installed on a server or on a client workstation. As claim discloses that transmitting information representing the estimated gamma

Art Unit: 2628

to a remote server on the network; The Adobe gamma modifies the color image when installed/executed on the server, a workstation, or on a network.

35. Claim 42.

Elaine on page 24, lines 1-18, teach the step of "The computer-readable medium of claim 27, wherein the instructions are contained both in physical data storage media and signals transmitted between the client and other resources on the computer network". Elaine does not explicitly specify transmitting information via computer network, however, Adobe on pages 2-9, teaches Windows NT, 95, 98 and Mac OS which could operate as clients or servers. Using Adobe Gamma (color management workflow) can be installed on a server or on a client workstation. As claim discloses that transmitting information representing the estimated gamma to a remote server on the network; The Adobe gamma modifies the color image when installed/executed on the server, a workstation, or on a network.

Claims 14, 25 and 40 rejected under 35 U.S.C. 103(a) as being unpatentable over Elaine, Adobe and "Why do Images Appear Darker on Some Displays? An Explanation of Monitor Gamma" By Robert W. Berger, copyright 1997 (referenced hereinafter as "Berger"), and further in view of "Display gamma estimation applet" by Hans Brettel, copyright 1999, said applet can be located at http://www.tsi.enst.fr/~brettel/TESTS/Gamma/Gamma.html (referenced hereinafter as "Brettel").

36. Claim 14.

Elaine on page 256 Fig. 9, and also refer to page 15, Fig. 14 illustrates the step of "The method of claim 1, wherein the dithered gray background represents a gray level of approximately 33%". the Berger article, page 2, section titled "What is the gamma of my display system?". Herein,

Art Unit: 2628

the article discusses the use of dither gray images in the setting of gamma for a display (which is the same process as in the Brettel applet). Further, the Berger article shows using gray values of 25%, 50%, and 75%. To one of ordinary skill in the art, it would have been obvious to use dither gray values as the background because of the conventionality of doing do (as shown by Berger) and because the two different gray areas (background and center square) need to be generated in different ways for the process to work. The reference Brettel applet on page 3 under step 2 illustrates dithering option (more colors or shading or etc.), but does not explicitly specify the term "dithered". The reference Berger on page 2 simulates the grays by dithering (the bottom row)

37. Claim 25.

Elaine on page 15, Fig. 14 illustrates the step of "The method of claim 16, wherein the dithered gray background represents a gray level of approximately 33%". the Berger article, page 2, section titled "What is the gamma of my display system?". Herein, the article discusses the use of dither gray images in the setting of gamma for a display (which is the same process as in the Brettel applet). Further, the Berger article shows using gray values of 25%, 50%, and 75%. To one of ordinary skill in the art, it would have been obvious to use dither gray values as the background because of the conventionality of doing do (as shown by Berger) and because the two different gray areas (background and center square) need to be generated in different ways for the process to work.

38. Claim 40.

Elaine on page 15, Fig. 14 illustrates the step of "The method of claim 27, wherein the dithered gray background represents a gray level of approximately 33%". the Berger article, page 2,

Art Unit: 2672

section titled "What is the gamma of my display system?". Herein, the article discusses the use

Page 28

of dither gray images in the setting of gamma for a display (which is the same process as in the

Brettel applet). Further, the Berger article shows using gray values of 25%, 50%, and 75%. To

one of ordinary skill in the art, it would have been obvious to use dither gray values as the

background because of the conventionality of doing do (as shown by Berger) and because the

two different gray areas (background and center square) need to be generated in different ways

for the process to work.

No decision rendered by a court or the Board is identified by the examiner in the Related

Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Javid. Amini

Conferees:

Mike Razavi

Richard Hjerpe

HICHARD HJERPE

SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600